

What is claimed is:

1. An in-line roller skate for skating on a skating surface comprising:

a boot for supporting the foot of a user,

a frame secured to the boot,

a plurality of skating wheels rotatably mounted on the frame for rotation in a common plane,

at least one counter-rotatable braking device rotatably attached to the frame comprising means to allow rotation of the device in one direction and to resist rotation in the other direction, and

at least one braking wheel rotatably attached to the frame forward of the skating wheels by means for mounting the braking wheel in contact with the braking device at least when the skate is tilted forward.

2. The in-line roller skate of Claim 1 wherein the braking wheel is mounted on an axle and the mounting means comprises a mechanism for slidably attaching the axle to the frame.

3. The in-line roller skate of Claim 2 wherein the mounting means allows displacement of the axle of the braking wheel in an upward direction inclined approximately ten degrees rearward from vertical.

4. The in-line roller skate of Claim 3 wherein the braking device is mounted on an axle [fixedly] attached to the frame.

5. The in-line roller skate of Claim 1 wherein the braking wheel mounting means comprises at least one arm attached to the frame.

6. The in-line roller skate of Claim 5 wherein the arm is pivotally attached to the frame.

7. The in-line roller skate of Claim 6 wherein the braking device is mounted on an axle fixedly attached to the frame.

8. The in-line roller skate of Claim 1 wherein the contact point between the braking wheel and the braking device is approximately vertically above the contact point between the braking wheel and the skating surface when both the front skating wheel and the braking wheel are in contact with the skating surface.

9. The in-line roller skate of Claim 1 wherein the braking device is oriented to allow rotation of the braking wheel against the skating surface in the forward skating direction and to resist rotation of the braking wheel against the skating surface in the reverse direction.

10. The in-line roller skate of Claim 1 having one counter-rotatable braking device and one braking wheel.

11. The in-line roller skate of Claim 10 wherein the counter-rotatable braking device, the braking wheel and the skating wheels are in a common plane of rotation.

12. The in-line roller skate of Claim 1 having two counter-rotatable braking devices on a first common axis of rotation and two braking wheels on a second common axis of rotation.

13. The in-line roller skate of Claim 12 wherein each braking device is oriented to allow rotation of the braking wheel against the skating surface in the forward skating direction and to resist rotation of the braking wheel against the skating surface in the reverse direction.

14. The in-line roller skate of Claim 12 wherein the first common axis of rotation has a first midpoint between the braking devices, wherein the second common axis of rotation has a midpoint between the braking wheels, and wherein the first and second midpoints lie approximately in the plane of rotation of the skating wheels.

15. A method of allowing an in-line roller skate to roll on a skating surface in one direction and to resist rolling in the other direction, the skate comprising a boot for supporting the foot of a user, a frame secured to the boot and a plurality of skating wheels on the frame for rotation in a common plane, the method comprising:

attaching at least one counter-rotatable braking device to the frame, the device comprising means to allow rotation of the device in one direction and to resist rotation in the other direction, and

mounting at least one braking wheel to the frame ⁷forward of the skating wheels so that the braking wheel is in contact with the braking device at least when the skate is tilted forward.

16. The method of Claim 15 wherein the braking wheel is mounted on an axle slidably attached to the frame.

17. The method of Claim 16 wherein the axle is slidably attached to the frame to allow displacement of the rotational axis of the braking wheel ⁷in an upward direction inclined approximately ten degrees rearward from vertical.⁷

18. The method of Claim 17 wherein the braking device is mounted on an axle that is ⁷fixedly⁷ attached to the frame.

19. The method of Claim 15 wherein the braking wheel is mounted to the frame by at least one arm attached to the frame.

20. The method of Claim 19 wherein the arm is pivotally attached to the frame.

21. The method of Claim 20 wherein the braking device is mounted on an axle that is fixedly attached to the frame.

22. The method of Claim 15 wherein the contact point between the braking wheel and the braking device is approximately vertically above the contact point between the braking wheel and the skating surface when the front skating wheel and the braking wheel are both in contact with the skating surface.

23. The method of Claim 15 wherein the braking device is oriented to allow rotation of the braking wheel against the skating surface in the forward skating direction and to resist rotation of the braking wheel against the skating surface in the reverse direction.

24. The method of Claim 15 having one counter-rotatable braking device and one braking wheel.

25. The method of Claim 24 wherein the counter-rotatable braking device, the braking wheel and the skating wheels are in a common plane of rotation.

26. The method of Claim 15 having two counter-rotatable braking devices on a first common axis of rotation and two braking wheels on a second common axis of rotation.

27. The method of Claim 26 wherein each braking device is oriented to allow rotation of the braking wheel against the skating surface in the forward skating direction and to resist rotation of the braking wheel against the skating surface in the reverse direction.

28. The method of Claim 26 wherein the first common axis of rotation has a first midpoint between the braking devices, wherein the second common axis of rotation has a midpoint between the braking wheels, and wherein the first and second midpoints lie approximately in the plane of rotation of the skating wheels.

29. An in-line roller skate for skating on a skating surface comprising:

a boot for supporting the foot of a user,

a frame secured to the boot having a pair of parallel elongated slots in the forward portion of the frame, the long axes of the slots inclined rearward approximately ten degrees from vertical,

a plurality of skating wheels rotatably mounted on the frame rearward of the slot for rotation in a common plane,

at least one counter-rotatable braking device rotatably attached to the frame approximately in line with the axes of the slots, the braking device comprising means to allow rotation of the device in one direction and to resist rotation in the other direction,

an axle slidably mounted in the slots,

and at least one braking wheel mounted on the axle, such that the counter-rotatable braking device, the braking wheel, and the skating wheels are in a common plane of rotation and the

braking wheel contacts the braking device at a point, approximately vertically above the contact point between the braking wheel and the skating surface when both the front skating wheel and the braking wheel are in contact with the skating surface,

wherein the braking device is oriented to allow rotation of the braking wheel against the skating surface in the forward skating direction and to resist rotation of the braking wheel against the skating surface in the reverse direction.

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